

**REMARKS**

Claims 24-26, 29, 30, 33, 35, 36, 38, 39, 41, and 42 are pending in the application. Claims 24, 33, 41, and 42 have been amended. Claims 33, 36, 39, and 42 stand rejected under 35 U.S.C. § 112, second paragraph. Claims 24, 33, 35, 36, 38, and 42 stand rejected under 35 U.S.C. § 112, first paragraph. Claims 24, 25, 29, 33, 35, 36, 38, 39, and 42 stand rejected under 35 U.S.C. § 102(b) over Wozney. Claims 33, 36, 39, and 42 are objected to under 37 C.F.R. § 1.75(c) as allegedly in improper dependent form. Claim 41 is objected to inasmuch as it is directed to a nonelected invention. Claims 26 and 30 are allowable.

**I. PRIORITY CLAIM**

**A. Correction of priority claim in first paragraph of specification**

The Examiner objected to the priority claim entered by amendment of the first paragraph of the specification on September 9, 2004. Applicants also noted the errors and submitted a Supplementary Amendment on November 22, 2004, before receiving this Office Action. The entry of this Supplementary Amendment should overcome the deficiencies of the previously filed priority claims. Applicants request entry of that Amendment, as well as this one.

**B. Effective filing date**

The Examiner contends that the polynucleotide and amino acid sequences of Figure 2 of the current application were first disclosed in U.S. Application No. 07/721,847, filed on June 14, 1991, and thus, that the effective filing date of the claims to these sequences is June 14, 1991. Applicants disagree. Applicants include a copy of U.S. Patent No. 5,013,649, filed as U.S. Application No. 07/179,100 on April 8, 1988.

The current application correctly claims priority to the '100 application, which discloses the polynucleotide and amino acid sequences of Figure 2 (see Figure 2 of the '649 patent, which discloses the same sequences as Figure 2 of the pending application). Accordingly, the pending claims reciting polynucleotides 1202-1543 of Figure 2 and nucleotides encoding amino acids 283 to 396 of Figure 2 are entitled to a priority date at least as early as **April 8, 1988**.

## **II. COMPLIANCE WITH SEQUENCE RULES**

Applicants have amended the application and drawing to comply with 37 C.F.R. § 1.821-1.825.

## **III. REJECTION UNDER 35 U.S.C. § 102(b)**

The Examiner rejected claims 24, 25, 29, 33, 35, 36, 38, 39, and 42 under 35 U.S.C. § 102(b) over the disclosure of the sequences of Figure 2 in Wozney. Wozney was published on December 16, 1988, while, as established above, the pending claims are entitled to an effective filing date of at least as early as April 8, 1988. Accordingly, Wozney is not prior art to this application under 35 U.S.C. § 102. Applicants respectfully request that this rejection be withdrawn.

## **IV. REJECTIONS UNDER 35 U.S.C. § 112**

### **A. Rejection of claims 33, 36, 39, and 42 under 35 U.S.C. § 112, second paragraph**

The Examiner rejected claims 33, 36, 39, and 42 as allegedly indefinite under 35 U.S.C. § 112, second paragraph. The Examiner suggested amending the claims to include the specific hybridization conditions recited in the specification. The Examiner also suggested amending claim 42 to recite "bone morphogenetic protein" instead of "bone morphogenetic protein-2." These claim amendments have been made and

Applicants respectfully request that the Examiner withdraw the rejections under 35 U.S.C. § 112, second paragraph.

**B. Rejection of claims 24, 33, 35, 36, 38, and 42 under 35 U.S.C. § 112, first paragraph**

The Examiner rejected claims 24, 33, 35, 36, 38, and 42 as allegedly lacking written description in the specification. The Examiner contends that the term “allelic variants” is not clearly defined in the specification. Applicants disagree with the Examiner. However, in the interest of furthering the allowance of the claims, Applicants have amended the claims to remove all reference to “allelic variants.” Specifically, claims 24 and 33 have been amended to remove the “allelic variants” language, and as a result, the language is also removed from dependent claims 35, 36, 38, and 42.

Applicants submit that these claim amendments overcome the rejection under 35 U.S.C. § 112, first paragraph, and respectfully request that the Examiner withdraw this rejection.

**V. CLAIM OBJECTIONS**

The Examiner objected to claims 33, 36, 39, and 42 under 37 C.F.R. § 1.75(c) as being of improper dependent form. Claim 33 has been amended to independent format, thereby overcoming this objection.

The Examiner objected to claim 41 inasmuch as it is drawn to a nonelected invention. Claim 41 has been amended to remove the nonelected subject matter, thereby overcoming this objection.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.


Respectfully submitted,

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Dated:

2/18/05

By:



Elizabeth E. McNamee

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**Attachments:**

- Paper copy of sequence listing;
- Electronic copy of sequence listing;
- Statement to Support Sequence Listing; and
- U.S. Patent No. 5,013,649.